Grade 6 Academic Standards

Unit 2 Lesson

Science

Standard 1 The Scientific View of the World

Technology and Science

6.1.7 Explain that technology is essential to science for such purposes as access to outer space and other remote locations, sample collection and treatment, measurement, data collection and storage, computation, and communication of information

6.1.8 Describe instances showing that technology cannot always provide successful solutions for problems or fulfill every human need.

6.1.9 Explain how technologies can influence all living things.

Standard 2 Scientific Thinking

Communication Skills

6.2.6 Read simple tables and graphs produced by others and describe in words what they show.

Standard 3 The Physical Setting

6.3.13 Identify, explain and discuss some effects human activities, such as the creation of pollution, have on weather and the atmosphere.

6.3.16 Explain that human activities, such as reducing the amount of forest cover, increasing the amount and variety of chemicals released into the atmosphere, and farming intensively, have changed the capacity of the environment to support some life forms.

Standard 4 The Living Environment

Interdependence of Life and Evolution

6.4.8 Explain that in all environments, such as freshwater, marine, forest, desert, grassland, mountain, and others, organisms with similar needs may compete with one another for resources, including food, space, water, air and shelter. Note that in any environment, the growth and survival of organisms depend on the physical conditions.

Human Identity

6.4.13 Give examples of how human beings use technology to match or exceed many of the abilities of other species.

Standard 5 The Mathematical World

Shapes and Symbolic Relationships

6.5.4 Demonstrate how graphs may help to show patterns, such as trends, varying rates of change, gaps, or clusters, which can be used to make predictions.

Social Studies

Standard 3 Geography

Environment and Society

6.3.13 Analyze and give examples of the consequences of human impact on the physical environment, and evaluate ways in which technology influences human capacity to modify the physical environment.

6.3.14 Give examples of how both natural and technological hazards have impacted the physical environment and human populations in specific areas of Europe and the Americas.

Standard 5 Individuals, Society, and Culture

6.5.5 Identify examples of inventions and technological innovations that have brought about cultural change in Europe and the Americas, and examine their impact.

Unit 2 - Activities 2, 3 and 4 satisfy the following Indiana academic standards:

Science

6.1.2 Give examples of different ways scientists investigate natural phenomena and identify processes all scientists use, such as collection of relevant evidence, the use of logical reasoning, and the application of imagination in devising hypotheses and explanations, in order to make sense of the evidence.

6.1.4 Give examples of employers who hire scientists, such as colleges and universities, businesses and industries.

6.1.8 Describe instances showing that technology cannot always provide successful solutions for problems or fulfill every human need.

6.1.9 Explain how technology can influence all things.

6.2.8 Analyze and interpret a given set of findings, demonstrating that there may be more than one good way to do so.

6.3.13 Identify, explain and discuss some effects human activities, such as the creation of pollution, have on weather and the atmosphere.

6.3.16 Explain that human activities, such as reducing the amount of forest cover, increasing the amount and variety of chemicals released into the atmosphere, and farming intensively, have changed the capacity of the environment to support some life forms.

6.3.19 Investigate that materials may be composed of parts that are too small to be seen without magnification.

6.7.2 Use models to illustrate processes that happen too slowly, too quickly, or on too small a scale to observe directly, or are too vast to be changed deliberately, or are potentially dangerous.